

They are,

Tribe.	Subdivision.	Bigin.	Place of abode.	Estimated No. of families.	Present Chief.	Remarks.
Saraban ...	Reisancee ...	Mogul ...	Kuhnuk ..	300	Asud Khan.	The Sarabans, or those of 'the right hand' held Inams and Jagheers from the Kelat Khans on whose authority they considered themselves dependant.
	Shahwanee ..	Bulooche ..	Moostoong.	1,000	{ Mahomed Khan.	
	Surpurra ...	Mogul ...	Kurdugan..	12,000	Syud Khan.	
	Bungoolzye	Syuds.....	Tepulinjee .	2,000	SherMahamed	
	Mahomed } Shahee .. }	Mogul ...	Moostoong .	1,000	Deenar.	
	Koord.....	Ditto ...	{ Dusht-i- } be Dowlut }	400	Loll Buksh.	
	Lahree	{ Rind Bu- } looche .. }	Nagao.....			
	Rind	Bulooche ..	Makron ...	12,000	{ Loll Buksh. Bulooche Khan. Meer Say Mahomed. Meer Baker.	
Jhalaban ..	Zahree	Mogul ...	Gatt.....	3,000	PraheemKhan	The Jhalabans, or those of 'the left hand' were Zumeendars who yielded by slight obedience to their ruler, their lands being hereditary.
	Mengul	Bind	Nall.....	2,000		They respectively occupied seats on the <i>right</i> and <i>left</i> in the Durbar.
	Mahomed } Hoosainee }	Mogul ...	Kohpoosht.	30,000		
	Beegunjaw ..	Prind	Wud	500	Kuhrer.	
	Zugur Men- gul.....	Brahooee ..	Nooshky ..	1,000	Ahmud Khan.	
	Mughee	Bulooche {	{ Jull and in } Mukran. }	12,000	Ahmud Khan.	

A three weeks sail in search of Health—Province of Arracan—Kyok Phyoo.
—*Its Harbour, Productions, Capabilities, Geological features, Visit to an active volcano.* By HENRY HARPUR SPRY, M.D., F.G.S., &c., Secretary to the Agricultural and Horticultural Society of India.

Circumstances rendering it necessary that I should have recourse to a little relaxation, in consequence of a severe attack of illness, I determined to take advantage of the sailing of the H.C.S. Amherst, to the coast of Arracan, on the 19th of last month (Feb. 1841) to secure a passage in her and visit the port of Kyok Phyoo, at Ramree. The ship left Calcutta, in tow of the Ganges, Government Steamer, and reached the Sand Heads at the close of the third day. Thence we proceeded under sail, and at the expiration of four days, dropt anchor in the picturesque, and most spacious harbour of Kyok Phyoo. We were there in exactly a week from Calcutta. The cruize from the Sand Heads across to the coast of Arracan, was a most delightful one. The wind was gentle, and the sea so smooth, that out of a party of 400 sepoys and camp followers who were on board, only two that I am aware of, underwent the miseries usually attendant on a sea voyage when undertaken for the first time.

On the morning early, of the day preceding the one on which we arrived, land was visible, and the entire day was spent in coasting along the

mountainous, rugged, but thickly wooded islands, called the Bolongas or broken islands. As night closed in, the anchor was dropt about a league outside the harbour of Kyok Phyoo.

There are two or three 'dangers' in the passage way, and it becomes therefore desirable, that day-light should exist while steering through the harbour. On one occasion, however, the Captain of the *Amherst* stood in on a bright moon-light night and took up his right position with out the occurrence of any accident. With the exception of the rocks here alluded to, the entrance of the harbour is deep and spacious.

I confess, as we sailed in, early the next morning, the general appearance of the harbour and scenery surrounding it, created a most favorable impression. The first object which attracted my attention was the Saddle Island. It stands on the south side of the entrance of the outer harbour, (there are, as it were, two harbours) is about three quarters of a mile, or a mile in circumference, and has a peak of about 120 or 150 feet in height. On it, a neat bungalow has been built by the present Marine Assistant, Captain Brown. Here it has become the fashion of late, for parties of pleasure to resort, to pass the day in the agreeable occupation of shell picking, coral gathering, bathing, ship sighting, or if it suits them better, drawing, reading, or geologizing, while the health inspiring breeze of the sea is blowing on their frames.

As the ship sails along, new and striking peculiarities claim the observer's attention, and some of the earliest of these, are, the cantonment bungalows of the officers which stud the beach at irregular intervals, for a distance of three miles as far as 'Sandy Point;' this forms the northern promontory of the inner harbour, and on it stands a two 12-pound battery, with an appropriate flag staff, under the designation of 'Fort Dalhousie.' On the land a little elevated above the sea shore, and about a hundred yards from the pebbly and sandy beach, with nothing to impede the current of the refreshing sea breeze as it comes off the ocean, are seen those cottages on piles, known as bungalows, overhung and shaded by the lofty *Dipterocarpi*; the bank on which they stand is of yellow sand, and along the beach at sunset, or in the morning, the valetudinarian may gallop without intermission on the active sure footed pony of the province for three good miles, and court the healthful breeze. A small thatched bathing house stands conspicuous. It is the resort, every morning, of the lovers of bathing, who delight to wrestle with the waves and luxuriate in the sea.

Kyok Phyoo has not reached that pitch of celebrity yet, as to call for the erection of bathing machines, but no beach in the world is

better adapted for them, if the taste of the public should ever turn that way.

The groups of large islands, covered with deep rich foliage, which form the harbour of Kyok Phyoo, rise abruptly from the sea, and afford water beside them so deep that ships can sail in safety. The hills are clothed to the top in dense and luxuriant vegetation, while the peaks of some run up to heights that are computed to extend to 7 or 800 feet.

The harbour of Kyok Phyoo, as I have before remarked, is extremely picturesque, and in its conformation and capabilities, reminds me forcibly of the one at Trincomalee—Like the latter, it is divided into what may be termed an outer and an inner harbour. The outer one being more of a roadsted than the inner, which is sheltered by the point of land on which the flag staff stands, and is safe for ships in all weathers. The harbour and roadsted, with the contiguous extensive deep bay, known as Fletcher Hayes' Straits, which stretches away amidst a series of many beautifully grouped islands between the eastern side of Ramree and the main, constitute an anchorage that I am assured would afford safe shelter for the shipping of the whole world.

With all these new and engaging features before me, it was with no ordinary feelings of delight that I stepped on shore to investigate and examine for myself. I found that a great and most beneficial change had been wrought of late in the physical condition and aspect of the station of Kyok Phyoo. The dense *low* jungle which formerly choked the cantonment grounds, had, through the active exertions of the local authorities, been effectually removed, as had the brush-wood and most of the timber trees which grew on a contiguous low belt of sandstone hillocks, which formed the south western boundary of the station. Drains for the outlet of accumulated water had also been cut, and temporary bridges erected. The last it may be expected will shortly be superseded by more becoming brick ones, as the materials, I was informed, had long been lying accumulated on the ground.

The salubrity of the place has by these measures been much improved, and the first intimation almost which I received on landing, was the gratifying assurance, that during the whole period of service (two years) that the regiment then on the island on duty had passed, not one death had occurred among the officers, or, (I believe I am correct in this) any one of them been obliged to leave it from sickness. One great and powerful complaint still exists against Kyok Phyoo as a regimental station. The Hindoostanee soldiers suffer dreadfully from

sickness. I was curious to learn, if possible, the cause of this, and the explanations which were offered me, in a great measure satisfactorily account, I think, for so unfortunate and much to be regretted an occurrence. The Arracanes or Mugs, as they are usually called, *invariably* (there is no exception to the practice that I could learn) build their dwellings on piles, so that the floor of the room is not only elevated a distance of two or more feet above the surface of the ground, but a *current of air* passes freely underneath it. At the jail, which is a series of spacious well continued erections, the system of the country has been followed, and the prisoners are housed in a number of large dwellings within a strong stockade. It is left for regimental sepoy to be experimented on, to test the value of Mug wisdom, by doing without piles and hutting the unfortunates in the manner now in use. To the men instead of being hutted as the people of the province are, and indeed *as the transported felons are*, (for Arracan is a penal settlement and Kyok Phoo has a party of above three hundred convicts stationed at it,) are compelled to live in low or unraised huts, which are built in a series of lines forming streets, and in such a damp locality, that I (although it was then far advanced in the month of February) sprung a couple of snipe out of the grass, within a yard of these abodes.

After strong, and I believe repeated representation, not only on the part of the duly constituted medical authorities, whose business it is to watch over such duties, but by the chief Military authority also, I am told that the Military Board sanctioned the formation of raised boardings or *matchauns within the huts*, so as to enable the sepoy to sleep off the ground. But this is not enough. Whatever dampness or exhalation is emitted from the soil (and that *something* noxious does transude the practice of building, which the genius of the people has suggested, proves) is still pent up by the mat walls which reach the ground and exclude the free circulation of air underneath, an observance which, as I have just remarked, is deemed essential to the preservation of health. Common humanity dictates the measure, and a State characterized for its considerate attention to its army, ought without hesitation to hasten to remove a grievance so fully calculated to produce the suffering and disastrous consequences which are now experienced.

There is another and I think not sufficiently regarded cause operative of the suffering which the sepoy undergo from sickness, a portion of the men, in the Volunteer regiments are Mahomedans. They are proverbial for their careless extravagance. 'A Mahomedan (said Ameer-ul-omrah the second son, and for some time minister of Mahomed Ali the

former Nabab of the Carnatic) was like a seive—much of what was poured in went through; while a Hindoo was like a sponge which retained all, but on pressure gave back, as required, what it had absorbed.' And so at Kyok Phyoo. The Mahomedan sepoy to gratify their habits of debauchery, borrow from their more thrifty Hindoo brethren who *stint themselves of the common necessaries of life* to gratify their saving propensities, and rather than purchase good sound, but expensive food pinch themselves with half meals of the worst description. The Hindoo sepoy of the 65th regiment brought away with them, I was assured by the officers, on their return to Calcutta upwards of 40,000 rupees which they had saved during their two years and half tour in the Province.

Leaving this painful subject for others of a more pleasing kind, I hasten to complete my observations regarding the site of the Cantonment of Kyok Phyoo. The soil is almost entirely sand, but yet much vegetation till recently abounded and even now the many lofty Dipterocarpi speak plainly of the adaptability of the ground to produce rich and luxuriant growths. These Dipterocarpi early attracted my attention. They are the trees, whence that (to the London market at least) novel article of commerce, known as the Gurjun or wood oil, is obtained. On examining into the process by which this most valuable product is obtained, I found that the practice was to cut a large notch something of the form of a rude arch into one side of the tree near its root, a depth of three or four inches, with the base sunk from the external edge inwardly to make it cup-like, so as to hold the oil. A fire is then kindled in the aperture for a few minutes, by which means, it appears, the sap vessels are stimulated, and the oil once set an oozing flows gradually down, drop by drop, till the cup-like hollow at the bottom of the notch becomes filled, when it is dished up, and set aside for use; successive supplies are for a long time in this manner obtained.

An abundance of these trees are to be seen in every direction about Kyok Phyoo, and I am told are equally plentiful on the island of Cheduba and elsewhere throughout the line of coast. While on the subject of these trees I cannot omit mentioning a circumstance connected with the produce from them, which although of somewhat a private nature, is yet of sufficient peculiarity to merit recital. More than two years ago, when in correspondence with Dr. Royle, I procured eight large casks full of the wood oil and shipped it for London to be sold in the London market and its value fairly tested. I knew that the Portuguese in the days of their early career in India had all dealt largely in the article, for Bolt in his 'Considerations of India,' particularly alludes

to it. I knew moreover that for time out of mind the people of the Province of Arracan and of Burmah in general, had used it for all sorts of work; that moreover Roxburgh alludes to it, and that in fact it was an article well known in India. What was my surprise at finding from Dr. Royle that so ignorant were, and still are, the authorities at the London Custom House of the nature of this substance, that they positively deny that it is a raw material, and will consequently only admit it as a '*Manufactured article*', which entails the payment of a duty that the oil itself would never sell for. In his recently published work on the productive resources of India, Dr. Royle has pointedly alluded to this lamentable ignorance on the part of the London Custom House authorities of some of the products of India.

To return to remarks on the station. The bazar is clean and well arranged. Beside the various roads young timber trees have been planted. These are not in the most flourishing condition. It may surprise some to be told that after so recently denuding the soil of the jungle, that trees should again be planted, but arborescent avenues would be a great ornament, serve to keep down temperature, and not to promote sickness. Many of those now planted are dead and it will be many years before any will assume a commanding appearance.

The people are decidedly superior in physical conformation to the Bengallees. They are an athletic and intelligent race. Their agricultural and mechanical appliances show it, and in their dealings with the Europeans they evince an independence of character that surprises a person accustomed to the manners of the obsequious Asiatic.

The harbour abounds with fish, and I was particularly struck at the ease and facility with which a daily supply was obtained for breakfast. Half an hour before the usual time for eating the meal the word was passed for '*Mutchee mar*.' At which command the boatmen took the net and proceeding to the beech threw in the lines, and in ten minutes three or four fine mullet were presented to the cook.

Besides these mullet, the pomfret are noted for their high flavour, and the oysters are of an excellent kind. At certain seasons, at the close of the rainy months, innumerable boats go off to Combermere Bay, an extensive but somewhat shallow roadsted, contiguous to Kyok Phyoo harbour, and here fish for the polynemous, the sounds of which they cure in large quantities, and sell to the China junks which annually pay a visit to the coast for the purpose of trading for these and other articles. It is the opinion of a gentleman, who has had opportunities of making abundant enquiries, that the fishing for isinglass might be conducted to a great extent.

Only the day before I arrived, a Chinaman, (the only one indeed who lives at Kyok Phyoo) who acts as agent for his countrymen who trade on the coast, bought up five maunds (400 lbs) of these fish sounds for about 25 rupees a maund.

A small rock, known as the Pagoda Rock, at the mouth of the harbour, furnishes the edible birds' nests in small quantities, and the government derives an income from it as well as from wood oil, wax and honey. In the year 1835-36, the collections of revenue on account of the edible birds' nest found at the island of Ramaee stood at 106 rupees and that for the whole Province at 4160 rupees in the Government books, while the collections on account of form of wood oil was 17 rupees—eath oil 162 rupees—bees wax and honey 660 rupees. The nests the China junks carry off. Such are the chief productions of the harbour. Many other fish of course abound, but the pomfret, the mullet, the beektee, and the oyster stand foremost.

I must now allude to another subject, and that is one of considerable importance. I allude to the manufacture of salt. The water of the harbour at Kyok Phyoo contains a much larger quantity of saline matter than that in the Sunderbunds. On comparison it will be seen, I believe, that the one holds near 20 per cent more saline matter in solution than the other. The government has already taken advantage of this circumstance, and has caused Golahs to be erected, whereat they store salt, which the people of the Province are but too happy to supply at 4 annas a maund. The manufacture is solely by solar evaporation, and the preparation is of the finest quality. Such opportunities must demand greater attention, and a few years more will probably see this superior article, superseding, almost to utter extinction, the dirty earthy article which is now obtained from the Sunderbunds.*

One of my earliest enquiries, after landing at the picturesque station of Kyok Phyoo, was, to enquire into the progress made in the recent coal discovery.† I found that the principal locality here alluded to, was not on the island of Ramree itself, but on a rock off the island about a mile, know by the name of 'the Cap Island,' but that minute traces of it had been found at a point of the main island which is nearest in contiguity

* My friend and correspondent alludes to the *Salt as sold in the bazaar*: it is perfectly white, and pure when first made, but the process of removal, and weighing dirties it in some degree and the adulteration by the retail dealer brings on the earthy look he alludes to: 7, not 4, As. is the price given.—H. T.

† I beg here to state that what is here stated regarding the coal localities at Kyok Phyoo was reported by me to the Secretary of the coal Committee and has since appeared in Dr. McClelland's Journal.

to this rock. The specimens, which I brought away will afford good average pieces of coal and its immediate connected formations. I took an early opportunity of availing myself of the kind offer of Mr. Brown, the Marine Assistant to the Commissioner of the province, and Col. Hervey, to whose exertions this interesting discovery I believe belongs, to visit the Cap Island and examine the formation. I found it partaking, as might be expected, when the general character of the line of coast is taken into consideration, of all the characters which denote active volcanic agency.—The rock itself is in great part made up of sand-stone, but so distorted are the strata by the upheaving force, that in places they appear at an acute angle, and even vertical, while they are so oppositely placed as to convey the idea, that at this point some confined force had here found an outlet, and split the incumbent bed. The rock runs up to a peak.

On one face of the rock a thick deposit of marly earth is seen, and on it an abundance of vegetation thrives. At the seaward point of the rock, and barely above high water mark, the coal is found. The sand-stone strata here, though not so highly distorted as in the more central part, is still at an acute angle. It is intersected by a bed of fatty marl of about a foot in thickness, and amidst its substance, and sometimes in a shaly deposit, the lumps of coal are found. I say lumps for as yet no continuous seam of coal has been discovered, but all is yet in its infancy, for, besides scratching the surface soil for a few inches, nothing has been done to test the extent of the formation.

I confess, when I look at the position of the place, I see no immediate prospect of a supply of coals; and taking the difficulties of keeping out the water into consideration, (even supposing that a continuous seam was found) with the great dip of the strata, nothing but an outlay for machinery could fairly test it.

Leaving the Cap island, the next locality that I visited, was the point of land on the island of Ramree, most contiguous to the Cap island. From the direction of the outcropping coal strata at the Cap island, it was inferred that similar indications might be found at the point of land now adverted to, and a close search being made, a formation identical with that at the Cap island was found with thin traces of coal. The dip here is equally great with that at the Cap island, and would require a shaft to be sunk, through the intervening sandstone stratum, to enable the searcher to ascertain if a bed of coal of any consistence did exist. When I came away Captain Lumsden, the Principal Assistant, was sinking two pits at a part of the island, some little way, perhaps half a

mile, from the spot where the indications of coal were observed, and the laborers had got perhaps ten feet;* but no effectual effort is likely to be made, nor indeed, is it possible under existing circumstances, for it appears that no expense is permitted to be incurred, while of machinery—not even a whim for raising the rubbish or water is erected.

Every disposition exists on the part of those in authority at Kyok Phyoo, to carry out the investigation, but they say, and say justly, that they have no funds placed at their disposal for doing so, and, out of their own pocket, it is too much to expect that they should defray the charges. The consequence is, the poor laborers are left to go unpaid, and great dissatisfaction is felt accordingly.

To leave this subject. After visiting the localities now mentioned, a proposal was made to sail across the harbour to the eastern point of the island, and proceed to the summit of a lofty hill which stood about three mile inland, and on which is the cone of an active volcano. The suggestion was immediately acceded to, and at four o'clock in the afternoon our party began to ascend the rugged path which conducted to this interesting object. I had heard that two or three other Europeans had already visited the crater, and that at the close of last year it was emitting smoke and ashes. Our companions were several boatmen, and each man, more from habit than singularity, carried, the never failing accompaniment of a mug a *dhow*, which is a large powerful knife in shape about the size of a regulation sword broken of in the middle.

After various humorous adventures, in the midst of the dense jungle, and traversing the crater of a small dried up volcano, we succeeded in reaching the anxiously sought hill, and when we reached the top, most amply rewarded we were. Never did I behold a more delightful piece of scenery. The view commanded the whole of the northern portion of the island, and that extensively sheltered anchoring ground, before alluded to, under the name of Fletcher Hayes' Straits.

But to the immediate objects of our visit. The cone was beautifully formed of the erupted mud, and covered to the very brink of the centre with thick verdant grass. Out of it grew luxuriant Casuarina trees. And here I cannot avoid mentioning a very remarkable circumstance connected with the appearance of these trees. Nowhere, as far as I could learn, do they appear, except on the cones of the volcanos, of which there are several, to be found on the island of Ramree. More than once when hid

* I have since heard from Captain Lumsden that the work has been abandoned as hopeless.

amidst the dense foliage of the forest, and at a loss in what direction to turn, we sought an open space and searched for the Casuarina trees, and in this manner were attracted to the desired spot. On the edge of the crater and about the sides of the cone amidst the grass, I picked up shells, (helix ?) pieces of indurated clay, quartz, and clay intersected with spar. They all go to show the character of the disrupted material. The edge of the crater was most uniform, and its diameter was about twelve feet. Its interior was filled with warm liquid mud, and on plunging down a rod, it passed on for about eight feet, and then struck in a thick plastic substance. After examining it in all directions, and satisfying our curiosity to the utmost, we hastened to return, and at length succeeded in reaching the boats, highly gratified and delighted at the success of our adventure, and the interesting novelty which it had unfolded to us.

I left Kyok Phyoo much pleased with the peculiar and many various features which it presents, and returned to Calcutta after an absence of three weeks, much improved in health by the excursion.

Description of some Ancient Gems and Seals from Bactria, the Punjab and India.

1. GRECIAN.

Whether it is, that the collection and study of ancient gems and seals, is less interesting in itself than the study of coins, or that it leads to less immediate and satisfactory results, I am unable to say; but perhaps both of these reasons may have combined to render the one less attractive than the other. But whether from one or from both of these causes the effect has been the almost total neglect of this study in India; although the specimens scattered amongst the numerous individual collections must now be valuable, as well as easily accessible. Some of these I have collected together in the accompanying plate, in the hope that others may be induced to make public what they may have stored up in their cabinets.

The earliest notice of an ancient gem procured in India, of which I am aware, is in Vincent's *Ancient Commerce*, vol. 2, p. 760, where he makes mention of 'an emerald belonging to the Archbishop of York, engraved with a Medusa's head, of Grecian sculpture, and brought from Benares.' And in the *Trans. of the Royal Asiatic Society* vol. 3, page 139, there is an engraving of 'an ancient Hindu intaglio,' with a long rambling description, by Colonel Tod. The gem itself is a beautiful one, representing Hercules